APPENDIX I:

CLAIM AMENDMENTS:

Amend Claims 1 and 8 as indicated in the following listing of the claims:

1. (*currently amended*) A process for the purification ~~work-up~~ of ionic liquids which are contaminated with a polar, high boiling compound which cannot be removed completely from the ionic liquids by way of a distillation and/or which has a vapor pressure of less than about 10 mbar at room temperature, which process comprises providing a mixture comprising the ionic liquids and a ~~further~~ the polar, high boiling compound, ~~wherein~~ and removing the polar, high boiling compound ~~is removed~~ from the ionic liquids by adsorptive separation.

2. (*original*) A process as claimed in claim 1, wherein the separation is carried out by means of ion exchange.

3. (*original*) A process as claimed in claim 1, wherein the separation is carried out by means of chromatography.

4. (*original*) A process as claimed in claim 3, wherein the separation is carried out by means of a continuous chromatographic process.

5. (*cancelled*)

6. (*previously presented*) A process as claimed in claim 1, wherein water, methanol, ethanol, 1-propanol or isopropanol or a mixture thereof is used as solvent.

7. (*previously presented*) A process as claimed in claim 1, wherein reversed phase silica gels, resins, ion exchangers, zeolites, aluminum oxides or activated carbon are used as stationary phases.

8. (*currently amended*) An adsorption separation process for removing an impurity from an ionic liquid contaminated with said impurity,
wherein said impurity is a polar, high boiling compound which cannot be removed completely from the ionic liquid by way of a distillation and/or said compound has a vapor pressure of less than about 10 mbar at room temperature,
wherein the ionic liquid has an ~~removal of a polar, high boiling compound from an ionic liquid of~~ anion and cation, the cation comprising at least one five- or six-membered heterocycle containing at least one phosphorus or nitrogen atom; and

wherein the process ~~comprising~~ comprises a first step of contacting the contaminated ionic liquid with a resin, and a second step of separating the purified ionic liquid from the resin.

9. (*previously presented*) The separation process of claim 8, wherein the resin is at least one of an ion exchange resin and an absorption resin.

10. (*previously presented*) The separation process of claim 8, wherein the separation is carried out by chromatography.

11. (*previously presented*) The separation process of claim 8, further comprising a step of removing low boiling compounds by evaporation.

12. (*previously presented*) The separation process of claim 8, wherein water, methanol, ethanol, 1-proponol, isopropanol or a mixture thereof is used as solvent.

13. (*previously presented*) The separation process of claim 8, wherein the anion is a halide.